# THE LEISURE HOUR.

BEHOLD IN THESE WHAT LEISURE HOURS DEMAND, AMUSEMENT AND TRUE KNOWLEDGE HAND IN HAND.—Comper.



"I HEAR THAT YOU SING," SAID MR. SOMERVILLE.

#### IDONEA.

CHAPTER XVII.

All the world's a stage,
And all the men and women merely players.—Shakespeare.

A UTHORS of all centuries have written of the "Behind the Scenes," both of theatres and private life Their descriptions have been generally painful, and far different from what has been otherwise

revealed to the public. Neville Fairborn, in his readings of many books, both ancient and modern, had formed his own ideas of the green-room and its accessories. These were as diverse from what he saw when he and Mrs. Keene next visited the Atlas as were his authors' sketches from the actual drama of the stage and life.

But thirty years' experience of London lodginghouse keeping had given Mrs. Keene an insight into the modes and manners of men and women far more

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elear than Neville's books could convey, and she was therefore able to enlighten him on these subjects so near his heart. She had also a marvellous memory for dates and events, and a gift of accurate description, which rendered her conversation both amusing and He was, accordingly, quite ready to endorse her verdict.

"I searcely think Miss Welborn is your sister," she "But dress disguises, and years change a woman. We will keep our appointment, and I shall

then be a better judge.

The appointment alluded to had been made by Mrs. Keene with the manager of the "Atlas, Therefore, who had once lodged at her house. while Miss Clorinda Welborn, who was evidently a popular actress, was being recalled for the second time, Neville and Mrs. Keene made their way to a side door, pointed out by an attendant, and awaited the great man in an obscure passage. He came to them in stage costume, and led them through a maze of intricate rooms and corridors filled with the stage appliances of the theatre, consisting, Neville thought, of tall scenes for shifting, carpenters' tools and paint-pots, and the like, all dimly lighted by half-extinguished gas. But when a door was opened at the manager's knock and voice, a different scene presented itself. A small, dull, half-furnished room was dimly visible, in which a young girl, in ordinary morning dress, stood amidst a number of large basins, filled with flowers.

"This is Miss Mackenzie, our future prima donna," said the manager, kindly. "I thought you had left

the theatre, my dear."
"No sir, I am waiting for my mother," returned Miss Mackenzie, who had been one of the actresses.

A homely, shabbily-dressed woman appeared at the moment, and the young girl, who seemed to Neville modest and pretty, joined her at the door.

"A promising young actress," remarked the manager. "Miss Welborn will be here directly. She has received quite an ovation to-night. These are her bouquets."

The manager left the room, and returned, leading

in Miss Clorinda Welborn.

"This lady is very anxious to be introduced to you, Miss Welborn. She is Mrs. Keene, an old friend of mine," said the manager, and immediately

Neville smiled at the majestic bows made by the ladies, and withdrew into a shadowy recess, hoping to pass unnoticed while Mrs. Keene began the con-

"I am sorry to intrude on you here, madam, but I had not your address, and I much wished to see you," began Mrs. Keene.

"It is certainly late," returned Miss Welborn, haughtily and theatrically. "Your busines" She is acting a part," thought Neville. "Your business?"

"I fancied I knew you, but I may be mistaken," said Mrs. Keene, cautiously, looking fixedly at the

"I do not remember ever to have had the honour of seeing you before," replied Miss Welborn, returning the gaze. "May I ask for whom you take me?"

"For a lady I once knew, named Miss Clarina Fairborn," answered Mrs. Keene, slowly, emphasising each word, and still looking at the actress.

Miss Welborn started, glanced round, and grew confused. She then made an evident effort at composure before she spoke.

"You-you are mistaken. I am not that person."

She paused and hesitated.

"Then perhaps you are acquainted with her?" suggested Mrs. Keene. "Your present name made me think you must have changed Clarina Fairborn into Clorinda Welborn for some purpose. She lodged at my house many years ago, and I am anxious to discover where she now is."

Mrs. Keene's manner and words were so easy

and simple that they disarmed suspicion.

The actress took a chair and sat down opposite her, with her back to Neville. She did not speak for a few moments, as if to consider what best to say. At last, drawing off a long black mitten, she said, with a half yawn, "Excuse me, I am much fatigued, and have still to change my dress before I leave the theatre. I cannot give you the information you seek, and must therefore wish you good night."

She rose and walked towards the door, upon which Neville stepped forwards, saying, "Let me entreat you to tell us if you know Miss Fairborn. I am her

brother."

"How long is it since you lost her? What age is she?" asked the actress, feigning well, if feigning at

"She left us about fourteen years ago," he replied. "I would receive her gladly if she would return." Miss Welborn laughed—a short, bitter laugh.

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"You speak like the advertisements, sir: home to your weeping friends, and all shall be forgotten.' Such an invitation sometimes comes too late. When young girls run away, parental arms should be opened at once, and not be kept folded until sin or sorrow has hardened the filial heart. Did you say her name was Clarina? There was an English girl of that name in Florence many years ago, but she called herself Clarina Nortina.'

"Did you know her? Can you remember her address?" asked Neville, eagerly.

"She was a tall, dark, handsome girl, but I don't remember her address. I should recognise her if I She was learning to act, or sing, or something. If I come across her, shall I send her to you?"
"You know more of her than you admit. You might almost be Miss Fairborn yourself," interrupted

Mrs. Keene.

"I am certainly not Miss Fairborn, and must decline to answer any more questions," returned the actress, angrily. "Does a public career make one public property, to be questioned by every person at will? Your address, sir. Mine can be obtained from the manager," she added, turning from Mrs. Keene to Neville.

He gave his card.

"Should I chance to meet your sister, I will communicate with you, sir," she continued, emphasising the you. "And, perhaps, if you find her, you will let me know. I object to cross-questions from

Miss Welborn gave a defiant glance at Mrs. Keene, who continued to inspect her with a calm, resolute suspicion, and asked for her private address. But Neville's scrupulous delicacy intervened.

"We are detaining the lady to-night. Perhaps she will grant us the honour of another interview,

"Certainly, sir," returned the actress, sweeping a curtsey and opening the door.

She stood with the handle in her hand until her unwelcome guests passed out.

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"If she is not your sister, I believe she is her friend, Miss Long," said Mrs. Keene. "I am sure she knows more than she admits."

"I will call on her again and entreat her confidence," said Neville, but Mrs. Keene shook her

And not without reason, for when Neville next sought an interview with Miss Clorinda Welborn through the manager, he was informed that she had completed her engagement with him, and that he did not know whither she was gone.

#### CHAPTER XVIII.

I wish her beauty That owes not all its duty To gaudy tire or glist'ring shoe-tie; Something more than Taffata or tissue can, Or rampant feather or rich fan. -R. Crashaw.

IDONEA'S Christmas holiday passed only too quickly. What were ten days with a brother so well-beloved. and amongst the poor—so much more attractive to her than the rich! Why, they barely sufficed to vanquish Miss Stiffens. Nevertheless, this was done, in a measure, by daily visits to the infirm father, who passed his life in a little dark back-parlour, reading books of devotion and various journals. Idonea made only partial way into Miss Stiffens's heart, Miss Stiffens walked right into Idonea's. Her devotion to her poor crotchety father, and the scarcely more manageable Percy, would have sufficed, when seen in daily life, to have melted adamant—at least. so Idonea told Neville, who, to Miss Stiffens's indignation, "almost lived in Crown Buildings."

As Percy was sometimes called where his sister could not accompany him, she and Neville were occasionally alone together. At such times they dis-

cussed Madame Ronda.

"If I can be of any use to her, through you, I should be glad," said Neville to Idonea, one afternoon, when she was straining her eyes to finish some warm garment for one of Percy's poor.

The twilight, so early in the East of London, was approaching, and she was standing in the embrasure of the smoke-dimmed window to catch the last gleams of sunshine glinting through the high chimney-pots. Neville sat in Percy's chair opposite, watching her. She had been that morning, for the second time, to visit Madame Ronda. "She is much better," said Idonea; "I think she

will be able to resume her teaching soon. I am not sure that my visit was acceptable to her, though the poor children shouted for joy when they saw me and the cakes. However, she asked me, of her own accord, to make out two small accounts for her. One was Mrs. Dooner's, and small enough it was! She only charges five shillings a lesson, and I am evidently thrown into the bargain. So are the choir practices—at least, she said Mrs. Dooner considered that she was doing her a service by inviting her to be present and to assist. I don't understand why Signor Mora gets two guineas a lesson for doing nothing and Madame Ronda only five shillings for teaching herself hoarse."

"Lady-teachers should strike," said Neville.
"But they can't starve," remarked matter-of-fact Idonea, peering into her petticoat.

"It seems a pity that strong-minded Miss Emma doesn't preach the rights of women at home," he

continued. "But I suppose women never do

"Oh, yes, they do. Mother and I agree very well; so do Miss Timmins and I."

"Extremes meet," laughed Neville. "Are not Mr. and Miss Timmins originals? I heard from Mr. Timmins this morning. He orders me home, assuring me that I shall soon be ruined if I remain in

"Shall you go?" asked Idonea, looking up from

"I think not. I hate being advised. I shall pro-

bably go abroad first.'

"Then that was what Mr. Duke Dooner meant when he said he should advise his father to take Heronshill for the autumn. But you will not go

"Probably not. Mr. Duke Dooner must have jumped with my thoughts before they were born. I will write and tell Timmins I mean to let Heronshill, and give Mr. Dooner the option of taking it.'

"Oh! if I had a place in dear Northumberland, and money enough to live in it, I would not leave it for all the world. There is nothing abroad or at home more beautiful than the Cheviots and the

"Then why do you leave them, Miss Umfre-

ville?"

"Because we are so poor."

Neville was shocked with himself for calling forth such an answer, and again took refuge in Madame Ronda. He inquired if Idonea thought her sufficiently provided for until she received her Christmas dues. She hesitated before replying, but her native truthfulness prevailed.

"I offered to lend her some money until she received hers," she said, "and prevailed on her with difficulty to take two pounds, one of which Mr. Duke gave me for charity. She owed that sum for rent. She said that ladies were thoughtless, and uncertain in their payments, which seems to me very wrong.

"To judge from what we see around us, the whole world is wrong, Miss Umfreville. I have been three months in London, and seen nothing but wrong."

"It is not so in the country. People are happier there."

"That has not been my experience. Happiness is ideal. It may be 'our being's end and aim,' but we never get it—at least, I never have, and never shall."

Idonea laid down her work with "I can see no longer," and glanced compassionately at Neville. She realised that poverty, with the blessing of friends who love you, is preferable to riches without them, and she pitied him in her heart. She did not speak, yet the sentiment of that pity "akin to love" communicated itself to Neville, and he, who had hitherto repulsed sympathy towards himself while giving it largely to others, felt that Idonea's, though unspoken, was at least worth possessing.

Each was trying to find something to say, when Percy came in. He brought an invitation from Mr. and Mrs. Somerville for a dinner on New Year's Day, and told Neville that they had included him. He was about to decline, when Idonea said, eagerly, "Oh! do come. It is my last day but one, and it will be so pleasant to be all together. We 'three' shall not 'meet again' when I am back at Queen's

He would not promise, though the kindly interest

touched him. He was what is called a contrairy man. Neither would he stay to tea, but asked Percy to accompany him to the Refuge, whither, he said, he

Here they saw the matron, who told them that the young woman whom Neville had been interested

in was restored to her friends.

"There are many such, as Mr. Umfreville knows, sir," said the matron to Neville. "This one begged me to give you her deep gratitude, and to say you had saved her."

Neville, who was always thinking of Clarina, and wondering what had been her fate, began to think London a sink of sin and misery. "Why do think London a sink of sin and misery. you let Idonea—I mean Miss Umfreville—stay in London? Was she not better at home?" he asked, when Percy left the Refuge.

"I think so; but she resolved to come, and she

came," returned Percy.

"Obstinate, woman-like," thought Neville. Nevertheless, when he reached his lodging, he enclosed a five-pound note to Madame Ronda, directing the envelope in a disguised hand, lest she should recognise his writing. It was no wonder that Mr. Timmins wrote strongly concerning the supplies. Neville's table was already covered with reports and appeals, for it is extraordinary how quickly your ready-givers are pounced upon by readybeggars.

Neville duly received and accepted Mr. Somerville's invitation for New Year's Day. When it arrived, he found himself in an old-fashioned, quiet enclosure, at the door of a city parsonage, at about ten minutes past six. A dim lamp burnt near the arched doorway, and disclosed a house built in ecclesiastical fashion, which looked old and dark on that New Year's night. The ghosts of ancient trees stood grimly guarding it, having, like it, weathered smoke and grime for many a year, and held fast to life by clutching at each other's roots in spite of the undermining of subterranean railways.

With the Somervilles punctuality was a virtue. They had waited exactly ten minutes when Neville's cab drove up, and the rector just said, looking at his watch, "We will give him a quarter of an hour. Young men of the present day are not to be depended upon. Even Umfreville is late now and

Much to Neville's surprise, and somewhat to his chagrin, he found that the two Mr. Dooners were added to the party. The dining-room was not large, and being lozenge-shaped, had a round table which accommodated itself to the room. Idonea sat between Mr. Somerville and Duke, Mrs. Somerville between Mr. Dooner and Neville, so Percy was any-

where, so to say.

It would have been difficult to determine which was the prettiest-Mrs. Somerville at seventy, with smooth fresh cheeks and silver hair, or Idonea at seventeen, with flushed face and auburn tresses. Mrs. Somerville wore the silver-grey dress and point lace cap and scarf that had figured on similar occasions for many and many a year; and Idonea the simple white muslin she had been wont to put on occasionally at Warkworth. A pink coral brooch and pink sash completed her simple attire, and even Duke Dooner thought her more elegant than the much beflounced and be-trimmed young ladies he was in the habit of meeting

Round-table dinners are generally cheerful. They were probably so at the time of King Arthur and his knights, and continue so up to the present time. Mr. and Mrs. Somerville were gifted with the happy sociability of a couple who had spent long, useful, good lives together, untroubled by serious personal afflictions. They "rejoiced with those who rejoiced, and wept with those who wept," while their own years flowed on smoothly amidst the turbulent sea around them.

"It does us good to have you with us once more, Dooner," said Mr. Somerville, "and to welcome your son for the first time. Nothing gives us such pleasure as to see young people about us. You have lost none of yours yet, Dooner?"

"No, but they are quite ready to go," returned Mr. Dooner, so cheerfully that Idonea was surprised.

At home he was so sleepy and tired that he rarely spoke much; here he was so wide-awake and bright that he seemed to have changed natures. He was at home, in fact, with his old friend and schoolfellowabroad with his wife's grand acquaintances. Neither could Idonea know that he was a supporter of all the great city charities, and that to him Mr. Somerville applied whenever there was special dearth in his parish.

The conversation turned naturally on what was

passing around Mr. Somerville.

"You did not come to our New Year's Eve service last night, Neville, after all," said Percy. "The church was crowded, and with the sort of people you wish to see."

"No; I am afraid I was too lazy to turn out at eleven o'clock at night," replied Neville. "It was very solemn and beautiful," remarked Idonea. "The old church was so prettily decorated for Christmas, and it was strange to feel so quiet in the heart of London. It was almost like the country. But seeing the New Year in is sadder here than there."

"I did not find it so," interposed Duke; "I danced it in at Lina's so-called juvenile ball, where the children were just like old people, with fans, and white boots, and such manners! Then they drank champagne and ate ices, and were so amus-

ing!"
"The children, Duke!" ejaculated Mrs. Somerville. "Surely they do not begin to be fashionable play at games, but surely not with white boots and fans."

"In the streets I am always expecting to see them mount stilts or turn acrobats, they are dressed to queerly," exclaimed Neville. "The boys look either like minikin sailors or Scotchmen, and the girls like harlequins."

And so the conversation ranged over various sub-

jects, "from grave to gay; from lively to severe."

The gentlemen did not sit long after the ladies left them; and when they joined them they found them side by side on the sofa. Mrs. Somerville had encouraged Idonea to talk of her home, and the talk had continued to flow fast and pleasantly.

"I hear that you sing, my dear," said Mr. Somerville, approaching Idonea. "Our daughter carried off her piano when she married, and we have never had money enough to spare to buy another. What shall we do? An evening without music is, some people say, a fast."
"I think it a feast," muttered Mr. Dooner.

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"Miss Umfreville can sing without an accompaniment," said Neville, standing before Idonea. "Scotch ballads are best with voice alone. Will you give us 'Jock o' Hazeldean'? I heard you sing it on the river."

The idea of an old-fashioned ballad without music pleased the elders, and even Mr. Dooner joined in a request for one. Idonea was timid but not nervous, shy but not conceited, so she resolved to do her best. That was so good, that her hearers applauded heartily. She had not sung Border ballads all her life in vain. They asked for one after another, and her whole spirit returned as she sang them. Neville istened entranced, and tears came into Mrs. Somerille's soft eyes. Nothing recalls the memories of our youth like an old ballad, and Idonea won all hearts that New Year's night.

"You have given us a happy evening, my dear; you must now help us to peaceful rest," said Mr. Somerville. "Will you begin Keble's evening hymn before we part, and so hallow our meeting and parting?"

She did so. They stood, and all joined.

"Sun of my soul, Thou Saviour dear,"

sounded as sweet from the tremulous voices of the aged as from the firmer tones of the young; and friendship and, maybe, love were cemented by the sacred song.

#### THE BREAD-FRUIT TREE.

THE staple diet of the Rarotongans consists of bread-fruit (Artocarpus incisa) and plantains. The bread-fruit harvest marks the arrival of summer, so that its name is a synonym for plenty. These islanders speak of "bread-fruit and winter"—i.e., summer and winter. Plantains mostly grow in distant and almost inaccessible valleys, whilst bread-fruit groves often surround their dwellings. When in season, and no untoward gale has destroyed the young crop, an air of contentment rests upon the countenances of the islanders. A lad, provided with a basket, will climb a bread-fruit tree near the blazing oven; in three-quarters of an hour the household meal will be ready.

This tree was originally—and is still—planted; but once in the ground, it propagates itself on all sides by shoots that spring from the roots. In three or four years they bear fruit. In the course of time they become stately trees, from forty to fifty feet high, sparingly covered with large pinnated leaves of a dark-green. These glossy leaves, eighteen inches in length and but little less in breadth, are elegantly cut into fingers. The trunk is slender for its height, being usually two feet in diameter. Occasionally larger trees may be seen. Under its imperfect shade bananas, coffee-plants, etc., flourish.

Seven varieties of bread-fruit are indigenous to Rarotonga; the eighth—until lately deemed sacred—was brought from Tahiti by Tangiia, the chief of one of the two original bands of settlers. Whilst most of them are very fine—the size of the largest husked cocoanut—one variety is no bigger than a large orange. The rind is generally very rough. They vary in weight from one and a half to four and a half pounds. Some are oval, others perfectly round. They grow either singly or in clusters of two or three. At

Rarotonga the trees bear only once a year; at Aitataki and some other islands twice, or even thrice. Before putting the fruit into the native steaming oven, the outer skin is pared off and cut in half, so that it may be more speedily cooked. Unlike our bread, it should be eaten hot, and is then very palatable indeed. When perfectly ripe, the cooked fruit is of a pale-lemon colour. The large core is, of course, removed, the edible part being about two inches thick all round. A single large bread-fruit is a substantial meal for one person. When cold, it is by no means palatable.

Newly-plucked bread-fruit will remain good for three or four days. If pierced, a milky juice exudes, and the fruit rapidly decays. Other food, when decayed, must be thrown away; not so bread-fruit. The pulp of a number of decayed bread-fruits (which, as yet, have no offensive smell) is emptied into a clean wooden trough, the rind and core being thrown away. The whole is then well mixed and worked together until the appearance is that of thick batter. It is now wrapped up in leaves of the indigenous banana and baked. When turned out it is of a rich brown colour. To those accustomed to it it is delicious, whether eaten hot or cold. This is the pake, or famous bread-fruit pudding, of the South

Sea Islands. When it is impossible to consume all the breadfruit (and the season of scarcity follows closely upon the heels of this superabundant plenty), the plan is to dig a hole in the ground, not too deep, line it well with plantain and banana leaves, and then pour a great quantity of liquid bread-fruit into it. Trough after trough will have to be emptied ere the hole will be filled. Five hundred large bread-fruits should go to one such pit. The top is then covered with leaves and well weighted with stones\* - not too closely, however, as it is desirable that the gas generated by fermentation should escape. This thick paste will remain good for a whole year. When the household is short of food, the covering of the pit is removed, and a portion of the contents taken out and cooked. The appearance is of a bright-lemon colour; the smell (arising from fermentation) is by no means agreeable. The leaves between the paste and the soil must be frequently renewed. This mat, as it is called when cooked, is about the hardness of cheese, slightly, but not unpleasantly, acid. It is much prized by the natives. Many Europeans profess to be disgusted at it; but the Polynesian equally objects

to our "fine old Stilton cheese."

At Manua, a small cluster of islands forming the eastern part of the Samoan group, pits four feet square and twelve feet deep are filled with mai, which keeps good for three, and even four years. The secret is, the pits are well lined with the thick leaves of the Barringtonia speciosa, sewn together with the split mid-rib of the cocoanut leaf. An incredible number of bread-fruits are required to fill one such pit. Young trees may be seen growing over these pits; the roots never strike into the mai, as the heat would speedily destroy them.

When the paramount chief, Tui Manuâ, wishes a pit of maî to be prepared, it is made six feet square and sixteen feet deep. To fill it on the day appointed, those under him empty their smaller pits in the different plantations belonging to him. For this curious information about the bread-fruit pits of Manuâ I am

<sup>\*</sup> Hence the native proverb, "Wise chiefs are the mat stones that repress the evils of society."

indebted to Taunga, who for thirty years was pastor there.

A sort of caoutchoue is obtained from the breadfruit tree by bruising the bark early in the morning, and at sunset collecting the hardened mass which has exuded. It is used for caulking canoes, etc., but requires to be heated over a fire before it is used. The writer entertains the idea that it will some day become a valuable article of commerce. Mixed with pounded candle-nuts, this gelatinous substance furnished the universal bird-lime of the Pacific Islanders, so much prized before the introduction of firearms. The timber of the mature tree is light and durable, the white ant never attacking the dark wood. It is extensively used in canoe and house building. At Samoa a roof of bread-fruit wood is still regarded as an heir-loom almost beyond price.

From the inner bark of the young tree is made a light, soft, brown cloth, much prized by the natives—less, however, than the white cloth prepared from the paper mulberry-tree. In 1852 I saw at Huahine all the women of the island beating out a single piece of bread-fruit cloth, several hundreds of yards in length, for the expected visit of the late Queen Pomare. Their ironwood mallets struck the soddened bark in perfect time. The rapid extension of commerce in the Pacific has already caused bread-fruit

cloth to be a rarity.

Another sort of bread-fruit (Artocarpus integrifolia) containing edible seeds has been introduced from Samoa. Its distinctive scientific name is derived from the circumstance that its leaves are undivided. This jack-fruit, as it is often called, is indigenous to Samoa, the islands of the Western Pacific, and the Indian Archipelago. It is far inferior to the ordinary bread-fruit of Eastern Polynesia. I do not care for it myself. It is remarkable that the first missionaries on Mare had some difficulty in persuading the natives to taste the jack-fruit, which is indigenous to that island. On the southern coast of New Guinea I saw some noble trees; but the black Papuans were too lazy to climb them to get the fruit.

It is impossible that such a fast-growing tree should attain to a great age. It is doubtful whether

the century is ever exceeded.

I subjoin a fragment of a song composed by a woman named Mouranga, a native of Mauke, upon the occasion of her sending a gift of fine bread-fruit cloth to Tu,\* the king of Tahiti, mentioned in Captain Cook's voyages. The song could not have been composed later than A.D. 1770. The late Queen Pomare was a descendant of this same Tu. Mouranga wished to gain a royal lover, and believed that her gift would prove irresistible. A storm, however, drove back to Mauke the great double canoe that was to convey it 500 miles over the ocean. So Tu remained ignorant of the intended present.

Te pakaku, e vaio i Mauke, Te kiri mango, e vaio i Mauke, Taku pokuru rairai ē E kave ki Tahiti, Na Tu ariki e kakau mai.

Coarse garments are good enough for Mauke, (Though rough) like the skin of a shark, they'll do for Mauke.

But my delicate bread-fruit cloth Must be borne to Tahiti, For the royal Tu to wear.

When a man was killed in battle, the body was usually eaten; the head, however, had to be presented to Tangaroa on newly-plucked breat-fruit leaves.

WILLIAM WYATT GILL, B.A.

Rarotonga.

\* Early this morning the church members brought their weekly present of food. Being the height of the bread-fruit season, it consisted of eighty-three bread-fruits just plucked. So shortly afterwards there appeared on our breakfast-table a tempting round mass just off the wood ashes and weighing four pounds. We all ate heartily of this fine bread-fruit instead of bread, and still a good portion was left. I thought of the poor at home, and wished that they could enjoy some of this superabundance.

#### AN IRON MASK.



THE mystery of the Man in the Iron Mask, to which Victor Hugo is again directing attention, having been brought so frequently and prominently before the public, it is unnecessary to enter into any discussion as to who he really was, further than to remark that many were the theories advanced in connection with his identity, even in defiance of his-

torical proof to the contrary.

Of these the most probable at first sight was that he was a twin-brother of Louis xiv, who was thus detained a prisoner for life for urgent State reasons; unfortunately no reliable facts can be adduced that any such person ever existed. Then came the Duke of Vermandois (a son of Louis xiv and the Duchess de la Valliere), although it is established beyond a doubt that he died in the midst of a camp, and was buried in the cathedral church of Arras in 1683. Even the beheading of the Duke of Monmouth in 1685 did not prevent his being mentioned. One yet more extraordinary was Henry Cromwell, the youngest son of the Lord Protector, who, on his return from Ireland, settled quietly upon his estate at Spinney Abbey, where he died in 1674. Claims were even set up for Mohammed Iv, the Turkish Sultan, who was deposed in 1687, as also for an Armenian Patriarch.

Fouquet, the finance minister of Louis xiv, having crossed his master in some of his projects, was accused of treason, sentenced to perpetual imprisonment, and thrown into the Bastile in 1661, from whence he was removed to the prison of Pignerol, where he died in 1680; but the Man in the Iron Mask,

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<sup>\*</sup> The "Otoo" of the printed narrative standing for "OTu." The "O" is the usual prefix to proper names in the nominative case, when they precede the verb. "Otaheite" is now correctly spelt "Tahiti."

whoever he was, lived till 1703, in which year he died in the Bastile.

Present opinion is in favour of Count Matthioli, secretary of state under Charles III, Duke of Mantua, who, having entered into a secret treaty with Louis xiv to deliver up Casale, and thus open up the way for the admission of the French army into Italy, betrayed the secret to some of the Italian Courts. Louis, finding himself deceived, had the Count secretly arrested in 1679. After this nothing is heard of Matthioli; but evidence has been adduced, on apparently good authority, identifying him with the Man in the Iron Mask.

It is incorrect to call the disguise an "iron mask," as it is well known to have been of "black velvet, stiffened with whalebone, and furnished about its lower part with steel springs, which permitted its wearer to breathe, eat, drink, and sleep without difficulty. It covered the whole of the face, and was fastened behind with a padlock; in other words, it was simply used for concealment. But that which is represented in the accompanying engraving was a knight's helmet of the sixteenth century, the bevor and vizor of which (being in one piece) have been riveted to the under or chin part;

the side-joints have also been unfastened and the ends filed away, their place being supplied by two rude hinges at the brow. It thus forms a sort of rude box, held close by two strong hasps, which may be fixed by a padlock or chain; and if used as it is conjectured it must have been, would be an instrument of torture of the most barbarous description, for the purpose of starving a man into confession or perhaps to death. A few small openings for breathing or seeing certainly, but for food none. Once shut into it, farewell to the world! Hope was shut out with the last click of the padlock or the last rivet of the chain. A more horrible death could hardly be conceived.

The late James Drummond, Esq., R.S.A., acquired this particular "mask" at the sale of the collection of the late Charles Kirkpatrick Sharpe. It was put up as "a rusty old helmet." At first Mr. Drummond supposed it to have been part of a trophy hung over a knight's tomb in a church, but on examining it he saw that it had been converted by the means described into an iron mask. This interesting yet terrible relic of "the good old times" is now to be seen in the Royal Institution of Scottish Antiquaries,

Princes Street, Edinburgh.

#### ACROSS SIBERIA.

BY THE REV. HENRY LANSDELL, F.R.G.S.

T was my good fortune last year to make the tour of the world, and to cross at least one continent by a track not often followed. Starting from London, I reached St. Petersburg on the fourth day, and pressed forward to Moscow, with the intention of visiting Siberia, to which my plans were originally restricted. The following notes briefly touch some of the less known points of the journey.

When preparing for my trip, I had serious thoughts of taking with me a camera and dry plates, thinking thereby to secure some novel pictures, to the surprise perhaps of the people. It proved well that I attempted nothing of the kind, for much trouble was thereby saved to me, and instead of my astonishing the natives, I found that the natives astonished me. Photography, in the common acceptation of the word, is not yet thirty years old, but its triumphs have been carried to the remotest regions. I visited parts of Siberia of which no English author has written, but discovered that the art had everywhere preceded me, and though there were many villages in which one could not procure white bread, there were few towns in which the same could be said of photographs. My journey carried me through many scenes, and these spoils of photography remain among my chief treasures.\*

The general view of St. Petersburg, as seen from the top of St. Isaac's, is a panorama the like to which I do not know where to seek in Europe. The same may be said in another way of Moscow, as seen from the terrace or spacious verandah of the Kremlin. The green roofs of the houses, the numerous trees between, and the absence of city smoke, make it in summer a beautiful place to look upon. After leaving

Moscow, however, I cannot say much for the artistic beauty of the journey to the Urals. The banks of the Volga and Kama are flat, and so is the country generally as far as Perm. Then begins the ascent of the mountains, in which Mr. Atkinson, the artisttraveller of Siberia, found spots here and there to inspire his pencil; but the railway traveller over the Urals sees little that will compare with Swiss or Norwegian scenery, or even that of Saxon Switzerland. A new interest is found at Nijni Tagilsk, where there is a mine of magnetic iron worked from the surface, the ore of which yields the extraordinary outcome of 68 per cent. of metal. Farther on lies Ekaterine-

burg.
At Tiumen we entered Siberia. Siberia is not wanting in skilful photographers, not a few of whom are Polish exiles. Some are Germans; one I met was a Frenchman, and another a Finn. Their landscapes are not particularly good, and their productions are dear. Landscapes of the size of views which may be purchased in Rome for sixpence, cost in Siberia at least six shillings, and we paid for a portrait group in cabinet size at the rate of sixteen shillings the half-dozen copies. It must be remembered, however, that the demand is limited. At Tiumen is a large prison, from which the exiles are distributed over the country. Many will be surprised perhaps to know that about 700 persons yearly get away in Siberia, and that in 1876 as many as 952 escaped, not necessarily out of the country, but from the control of the police. From Tiumen to Tobolsk the journey by road lies through a flat country with Tartar villages, the mosques and minarets of which remind one here and there of the shingled steeples of English villages. From the citadel of Tobolsk an extensive view is obtained of the junction of the Tobol and Irtish rivers. There is also, near, one of

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<sup>\*</sup> The substance of this paper was read before the Photographic Society of Great Britain.

the few monuments in Siberia, raised to the memory | we came was Tomsk. Proceeding east, the traveller of Yermak, who in the sixteenth century conquered | comes to Krasnoiarsk, situated on the western bank



TUNGUSES, WITH REINDEER AND BIRCH-BARK TENT .- CENTRAL SIBERIA

a large part of the country. Perhaps the most interesting objects, however, to an artist in this



OSTJAK WOMEN OF THE TENESEI PROVINCE.

region are the Samoyedes, with their reindeer, and the Ostjaks, whose tents the traveller passes in steaming on the Obi. The next important town to which

of the Yenesei, about the centre of the gold-mining district. It is perhaps not generally known that several tons of gold are found annually in Siberia. I heard of two gold-seekers—and I dined at the house of one of them—who were said to have found within the past ten or twelve years more than sixteen tons of gold. To the north of Krasnoiarsk are natives called Tunguses, and other tribes of Ostjaks. The Ostjaks of the Obi are to a considerable extent Russianised; but the Ostjaks of the Yenesei still keep to their native customs. They live by hunting and fishing. The traveller who visits them in spring has the opportunity of witnessing a magnificent spectacle, for near the mouth of the Yenesei the ice breaks up annually with such a manifestation of the powers of nature as beggars description.

About six hundred miles from Krasnoiarsk I was presented with some handsome photographs of the Alexandreffsky Central Prison, the largest prison in Siberia. It contained about fifteen hundred prisoners, most of whom had nothing to do, and, what was worse, nothing to read. This latter defect, I am thankful to say, I was permitted and enabled to remedy. We reached Irkutsk in time to see it in flames. A line of fire, probably a mile and a half long, and in one place an area of flame which I judged to be half a mile square, with the inhabitants fleeing by thousands, made up a spectacle to see one of which is enough for a lifetime.

It was my original intention to have retraced my steps from Irkutsk, and to have come home by the Caucasus. Subsequently I determined to push forward and go round the world. We therefore proceeded to, and crossed over Lake Baikal, which has finer scenery than anything we had thus far witnessed in Siberia. In some places the shores are exceedingly abrupt, rising occasionally to a height of 1,200 feet; the rocks at the top being covered with forests of dense larch. Basaltic rocks also appear. This wonderful lake has been sounded to a depth of 900 feet. Out of it flows the river that of all rivers in Siberia

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is the first to open and the last to close. It is so cold there in winter that pigeons flying across the lake are said sometimes to fall frozen and dead; and even in the height of summer I was glad to wrap myself in an "Ulster," and get inside the carriage which stood on the steamer's deck. On reaching Kiakhta we came to the borders of the Russian and Chinese empires. Here tea could be bought cheaply enough, but for a lemon to flavour it I was asked the modest price of half-a-crown. At a Chinaman's house in

clear, and right pleasant it was to miss the shaking of the tarantass, the dusty clouds of the road, and to glide smoothly down the beautiful Shilka. The banks were superb. There was abundance of forest and plenty of pasture. Here the banks were of sandy red, and anon we passed by rocky cliffs, such as adorn the windings of the Wye. My destination was Kara, which means something bad or woeful, and so, appropriate to a place of punishment. It was a colony of 2,000 exiles condemned to work in the gold



TUNGUSE GIRLS IN WINTER COSTUME.

Maimachin they gave us a dinner of thirty dishes, including, I believe, garlick, swallows' eggs, seaweed, and birds' nests, all of which, thanks to a good digestion, we survived, and left Kiakhta for Chita and Stretinsk. We had now to pass over the Yablonoi, or Apple-Tree Mountains, in doing which we had improved scenery, but worse roads. At length, on the 24th of July, we reach Stretinsk, having driven by horses a journey of 3,000 miles.

From this point my interpreter returned, and I was left to admire the beauties of nature alone. I say alone, because I had first to descend a river in a rowing boat—for seventy miles—in charge of a Cossack, with not half a dozen words in common between us. The weather was warm, the stream was swift and

mines; 800 were murderers, 400 were robbers, and 700 were catalogued as "vagabonds." Kara is a famous place for political prisoners, of whom, however, according to information given me, there appeared to be less than seventy-three. I mention this because I am persuaded that ordinary English ideas as to the number of political offenders sent to Siberia is largely in excess of the facts. So, too, is the popular notion of the treatment of prisoners in the mines. I have been repeatedly asked whether they do not live and work and eat underground, being never allowed to come up again. Now this cannot be true of the gold mines, for they are worked from the surface; and as for the silver mines about Nertchinsk, I inquired into the matter, but I never

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s won-0 feet. Siberia heard such a charge made in the neighbourhood. On the contrary, by some who have worked in those very mines, I have heard the charge flatly contradicted. There still clings to Kara a bad name as a legacy of former times, but I can only say, after an ample opportunity to see it thoroughly, that it struck me as one of the best managed of the penal estab-

lishments of Siberia.

On leaving Kara I took steamer for Khabarofka, at the junction of the Amur with the Ussuri. The beautiful scenery of the Shilka continued to its junction with the Argun, these two rivers forming at their confluence the River Amur, which, taken all in all, is the finest river for scenery I have travelled. It is not too much to say that during its course of more than two thousand miles its banks exhibit the beauties both of the Rhine and the Danube. I am not unacquainted with the beauties of both these rivers, and though there is no one spot on the Amur which equals in grandeur the Iron Gates of the Danube, yet one sees repeated the mountains and Lurlei rocks of the Rhine, and the beauties of the Danube above Vienna; whilst the expanse of water on the lower Amur, and the number and beauty of its islands, exceed by far anything I have seen in Europe. One of the most striking points of interest on the Amur is the number of native and other races inhabiting its banks. On the upper part of the river the north bank is inhabited by Tunguses, Orochons, and Manyargs, the southern bank by Manchu, Daurians, and Chinese. Specimens of this latter group were seen as we passed the Chinese town of Aigun and the Russian town of Blagovestchensk. On arriving at Khabarofka I found myself constrained to go on the whole length of the river to Nikolaefsk, in doing which I made the acquaintance of two remarkable tribes called Goldi and Gilyaks, of both of whom I secured some valuable photographs, not only of their persons, but their costumes, their houses, and their charms or gods. The Gilyaks do houses, and their charms or gods. not cultivate the land, consequently eat no bread or flour food, but subsist chiefly on fish, which is so plentiful that in the season a salmon of twenty pounds may be bought for a penny. The Gilyaks are said never to wash, and their photographs do not belie the saying. A telegraph engineer told me he one day gave a Gilyak a piece of soap, which he put in his mouth, and, after chewing it deliberately, pronounced it very good. The Goldi consider themselves a grade higher than the Gilyaks. Both tribes buy and sell their wives, of whom a rich man may have several; but should he desire to become a Christian the Russian missionaries compel him to take one of his wives and be canonically married, after which the newly-married man returns his former wives to their respective fathers, who take them back at half price! The Russian mission priests have baptized large numbers of the Goldi. One of my photographs represents a group of Goldi Christians, with their ear and nose rings, and embroidered garments of fish-skin. This picture is particularly valuable, because not easily obtained, for these people have not yet become vain of their faces, and, in fact, do not like to be photographed.

From Nikolaefsk I had to retrace my steps to the Ussuri, and in so doing landed at the Gilyak village of Tuir, where I bought some of the people's charms or gods, and where also I inspected a group of ancient Tatar monuments, which by some are said to be as much as six or seven hundred years old.

On reaching the Ussuri the character of the scenery changed. The stream was narrower, the hills lay back from the river, and the intervening space had more of the character of English park scenery. As we proceeded southward the weather became warmer. and we got among the fauna and flora of hotter The Cossack villages became fewer and regions. smaller, and some were deserted by their inhabitants, who had migrated in a body farther south. So long as I was on the steamer I met with persons who, like myself, could speak more or less of the three principal languages of the world-namely, English, German, and French; but as a final trial of my linguistic powers, I had to drive a hundred miles by horses through a rich country almost without inhabitants, with extensive prairies, abundance of game, and also, I must add, of tigers. My arrival at Vladivostock brought me into contact with more Chinese, also with Manzas, or descendants of Chinese convicts banished to Manchuria, and with Coreans, who wear their hair tied up like a horn on the top of the

And now I had come to the end of a journey across Europe and Asia, 2,600 miles of which had been traversed by rail, 5,700 by river, and 3,000 by road, a total of nearly 12,000 miles, in the course of which I had hired a thousand and five horses. I feel that I cannot easily do justice to the kindness I everywhere received, both officially and privately. To me, however, in Russia as well as Siberia, official kind-

ness was not new.

On my first visit to Russia, in my holiday of 1874, permission was given to me to visit the prisons of St. Petersburg by General Trepoff. In 1876, through the kindness of Count Schouvaloff, I gained access to the prisons of Finland, the result of which has been the supplying adequately of the whole of the prisons and hospitals, and other institutions of that country, with the Scriptures. In 1878 the English were supposed to be unpopular in Russia, but I was favoured during my holiday with a letter from the late Minister of the Interior, which opened all the hospitals and prisons on the way to Archangel; and now, last year, I was similarly favoured by the present minister with regard to Northern Asia. Besides my own efforts, I was able to give or send books to each of the Governors for the institutions of their respective provinces, and the result was, that I was enabled to distribute more than fifty thousand Scripture books and tracts, and supply a copy of the New Testament, or some portion of it, for every room of every prison, and every hospital throughout the whole of Siberia. The hospitality of the people was unbounded. It began at St. Petersburg, where, during my stay, I did not once dine at my hotel: and the farther east I went the more this kindness multiplied and grew. A steamboat owner at Tiumen so admired my visitation of prisons that he enjoined upon his captain to pay us every attention, and would take nothing for the carriage of a waggon-load of books a distance of nearly 2,000 miles. At Irkutsk, where thousands escaping from the fire had to spend the night in the open air, on the banks or islands of the river, we were sheltered in the house of an exiled lady, and so things went on at Kara, at Nikolaefsk, and at Vladivostock, which last was a bonne bouche to the whole, for here I found not only a free lodging, as I had done at Nikolaefsk, but officers and their families, and other speaking English and French. To these

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Governor's family, the refinements of an English mansion; so that when I left in a Russian man-ofwar, and the vessel, firing a salute, steamed out of the harbour, the Governor and his family waving their handkerchiefs on the balcony, I felt sorrow and real regret in leaving a country that is much belied, and more often misjudged, whose summer climate left nothing to desire, to the hospitality of whose people I know no equal, and amongst whom I had been permitted to accomplish one of the happiest labours of my life.

Thence crossing America and the Atlantic, I reached Liverpool on the 25th of November, after an absence of rather less than seven months, and entered London from the north-west as I had left it by the south-east, thus finishing the circle of the earth in about as straight a line from London as could well

accomplishments were added, in the case of the be done, keeping within about ten degrees of latitude to the north and south. The total mileagecovered was 25,510, of which 16,000 were accomplished by steamer, 6,500 by rail, and 3,000 by horses; the average speed on 210 travelling days being 159 miles a day. The Siberian travelling by tarantass was the severest thing I ever did, but the journey was accomplished on ordinary-sometimes meagre-food, and with nothing stronger for drink than tea. I had not a day's sickness, came back stronger and stouter than I started, and by God's. good providence I was permitted to return without a scratch or a bruise. I need hardly say it was the pleasantest tour of my life, and the happiest thought connected with it is that I was useful, I trust, in depositing in the prisons and public institutions throughout Siberia, materials of thought and life, and love and hope.

#### CURIOSITIES OF COMMERCE AND TRADE.

V .- SUGAR .

SUGAR has become so intimately associated with all our dietary and culinary affairs that it is difficult at first sight to perceive how such matters were ever carried on without it. Did our forefathers really drink their tea and coffee, and make their jams, and eat their rhubarb pies and apple dumplings without

Well, no. The truth is that when sugar was unknown to us we had no rhubarb to make pies of, and no apples for dumplings. We had a few crabs and a few currants. The little strawberries that grow in our woods were the best we could boast. We had no cherries, and nothing better in the way of plums than the bullaces and sloes that grow in our blackthorn hedges. The combined ingenuity of all our "purveyors"—our Castells and Browns, and Crosses and Blackwells-would have been severely taxed to make much in the shape of jam therefrom. As for tea and coffee, we have already shown that they are of comparatively modern date in this country. It is really marvellous when we come to inquire into the history of our innumerable "necessaries of life," to find how few of them were known a century or two back.

The earliest introduction of sugar into this country is shrouded in a good deal of obscurity and uncer-Our space will not permit of our discussing the matter. We may just observe, however, that it is probably about five hundred years since the article first reached our shores. Sugar-refining in England cannot be traced back farther than 1659, and it was James II who first imposed a tax upon it. That gives just the salient points of its early history. A few figures may be added to afford some idea of the devel-

opment of the trade.

In the year 1700—somewhere about 300 years after our first acquaintaince with it-sugar had so far become an article of general use that the whole kingdom consumed about 9,000 tons, or, as sugar quantities are usually quoted, 178,571cwt. Last year our total imports of sugar and molasses amounted to 21,500,201cwt. To show the rate of progress during the past few years:—In 1858 the Board of

over 10,000,000cwt. The two following years therewas a slight relapse; in 1861 the quantity was nearly 12,000,000cwt. Another slight relapse for two years, and in 1864 the figures are 12,279,620cwt. The next three years fell off a little, but in 1868 totals came up to 13,372,490cwt., and the next year showed nearly The year 1870 imported 15,303,918cwt.; the same. 1872, 16,202,613cwt.; 1874, 17,185,999cwt.; 1875 reached nearly 20,000,000cwt; and 1877 amounted to 20,349,058cwt. Last year, as we have stated, the entire quantity reached the enormous total of 21,500,201cwt.

In a former article we took our readers to the West India Docks as the head-quarters of the importation of coffee; we now go to the same spot for the greatest emporium of sugar in England. There are a good many other points at which the article comes into the country, but of the 21½ millions of hundred-weights received by us last year, nearly 21 millions-2,423,580cwt.—came into the sugar warehouses of the

East and West India Dock Company.

In our previous article we spoke of the quay here as about half-a-mile in length; the buildings extending along it constitute nine great warehouses with their respective offices; of these nine, two, as we explained, are devoted to coffee, the other seven mainly to the storage of sugar. The space afforded in these buildings is really enormous, though in order fully torealise their extent one ought to set out on a tour of inspection through the whole range of buildings. As the reader cannot very well do that, a slight computation may assist him to form some idea on the subject. There are eighteen floors in each warehouse, eighteen rooms, that is to say. They are somewhere about 120ft. long and 100ft. wide, the space from floor to ceiling being about 8ft. Now the policeregulations for the dormitories of the common lodginghouses of London require that each adult shall have-300 cubic feet of space allotted to him. If we multiply 120 by 100, and that again by eight, we shall get the cubical space afforded by each floor. It gives 96,000ft. Divide this by 300, and we find that if each floor were a common lodging-house sleeping Trade returns show that imports amounted to a little room, the police would license it for 320 people.

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families, To these But there are eighteen floors to each warehouse, so at this rate each would accommodate 5,760 people, and in the whole of the seven buildings allotted to the sugar trade there, we might house a population of 40,000—some 9,000 more than the whole of the population of a city like Oxford according to the last census; nearly as many as are to be found in York; 11,000 more than in Hastings, or the whole population of Leamington nearly twice over. If all the people of Leamington were lodged here, and with them the people of another town as large, they would not be nearly so closely packed as they are in the lodging-houses, because in them two children under ten years of age are allowed to count as one grown

person.

To get back into the sugar trade, however. Last year's imports into these places amounted to 121,179 tons of sugar, and there has occasionally been stored here as much as 40,000 tons at one and the same time. It all comes by water, none of it from the out ports by rail, that is, and most of it in sailing vessels. When the ships are not too large to come into dock, they lie alongside the quay and discharge their cargoes; if, as is the case with some of them, they will not come into dock, they discharge into lightersbarges, that is-lower down the river, and the lighters are brought alongside the quay. The sugar is packed in hogsheads of about 18cwt., tierces of about 10cwt., and barrels and bags of about 2cwt. A large cargo may consist of 800 hogsheads, 200 tierces, 400 barrels, 2,700 bags. Such a cargo arrived shortly before the writer visited the docks recently, and the whole of this vast quantity was landed, weighed, sampled, and warehoused between five o'clock in the morning and four in the afternoon.

The landing is done by hydraulic machinery, comparatively slight-looking cranes, which by merely turning on the water in a small pipe are made to catch up a ton of sugar and spin round with it with as much ease as any one at the breakfast-table may hand across the sugar-basin. A really tremendous power lies hidden in those not very imposing-looking machines; and where the vessel is large, and speedy work is desirable—as it usually is, and especially when it is a steamer, and "demurrage" is accumulating all the time it is in dock-three or four of them can be brought to bear on the same cargo. Hence such feats of expedition as that just mentioned become possible. The weighing, sampling, and stowing away in the warehouses must keep pace pretty nearly with the landing, or the quay would soon become choked up, and business be greatly impeded and complicated. There is no duty on sugar now, and there is therefore no government supervision. Whatever is done here is in the interest of the dock company or of the merchant. The warehouses are not "bonded." and the sugar as it arrives is stowed here merely for the convenience of the owners, who pay what is termed a "consolidated rate" of 11s. 10d. per ton for landing, weighing, sampling, and warehousing for any length of time not exceeding 84 days, beyond which an additional charge is made for warehouse room.

The first thing done when the sugar has been deposited on the quay is the weighing. There is nothing very noteworthy in this. The sampling, however, is interesting, and brings before us not merely the bags and barrels containing the sugar, but the sugar itself. The way in which samples are taken depends on circumstances. Here is a hogshead of Demerara sugar, lying on its side, and

weighing from 18cwt. to a ton. The sugar is dry and crystallised, and a sample of it will be taken by boring a hole with the "centre-bit" in the top of the hogshead, and thrusting in an implement similar to the one used in sampling coffee, and which we have described as like a very large cheese-taster. This will go in a good way towards the middle of the barrel, and if it were a thoroughly honest world the ounce or two of sugar which comes out in the hollow of the implement might be relied upon as a fair sample of the whole. It has sometimes been found, however, that the top of the hogshead contains one quality of sugar and the bottom another. A sample is therefore drawn from each end. From this duplicate examination the quality of the sugar is determined, the proper mark painted on the hogshead, and away it is bowled on a little trolly, to be stowed away in its appointed place. There are some sorts of sugar, however, which are not dry and crystallised like this hogshead of Demerara, but contain a good deal of molasses, sugar, and treacle. In the course of the voyage this will have settled down at the bottom of the sugar forming a "foot," as it is termed in the trade, more or less thick according to the amount of molasses in the bulk of sugar. The hogsheads, barrels, etc., are always stowed in the vessel on their sides, and a splash of whitewash is put on the top of each to mark it as the upper side. This whitewash mark is kept uppermost when the barrel is landed, so as not to disturb the "foot" that has settled down at the bottom. If samples were taken in the manner described—if the iron implement were thrust in horizontally through the ends of the cask as it lies on its side-the "foot" that has settled down would not be discovered, and the sample would not be a fair one of the whole bulk. Instead of this, however, the hole is bored through the splash of whitewash on the "booje" of the cask, as the coopers call it-the bulge, that is to say, or the point in the cask where it bulges out most. The hole is bored at the top, and the sampling iron is thrust down from top to bottom, bringing out a little pillar of sugar varying perhaps from a light sugar colour on the top to the darkest of treacle colour at the bottom.

As to the bags, they are rapidly sorted to the respective qualities of the sugar contained in them by stabbing each bag with a proper iron. An experienced officer of the company stands near a bench, and a bag is wheeled up to him on a hand-truck; he thrusts in the iron, and the sugar brought out is laid on one of a number of little divisions on the bench. "A," he says, and a man, who stands ready with a pot of paint, marks "A" upon the bag. Away it runs, and up comes another. If that is the same quality, that is marked "A" too. If different in size of grain, or in "complexion," or in "freedom," it is marked "B," and the sample goes into A or B, according to its quality; or, if it materially differs from either, it will go into a third division and be classed "C." The fourth bag goes into A or B, or makes a fourth class, D, and so on. A cargo of 30,000 bags will, of course, often present a good many shades of quality, but in this way they are sorted with great rapidity. To an onlooker who is unfamiliar with the proceeding, it is somewhat complicated by cries of "Butcher," "Crown," "Doctor," "Duke," and so on. This, however, is merely another way of saying B, C, or D, which, in the midst of a good deal of noise and hubbub, are apt to be

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ciat is a mistaken one for the other. C is apt to be mistaken for D, or D for B or E. Instead of calling "c," therefore, it is the custom to cry "Crown;" B becomes "butcher" or "broker," or anything else beginning with B, and so on.

The chief points determining the value of sugar, as we have just intimated, are its size of grain and its "complexion"—its shade of colour, that is to say. There is one kind a little of which sometimes finds its way into these warehouses, known as "concrete." It is not a loaf-sugar, but cakes so hard in the casks it comes in that there is no way of getting it out but by stripping the cask away from it, when it will stand in a solid block, with, perhaps, four or five colours lying one upon another, like geological

deposits.

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The turning out of sugar from the receptacles it comes in, by the way, forms an important part of the work here. There is one large floor in each ware-house devoted to it. About one cask, or barrel, in every ten that comes in is hauled up to the "taring floor," and the contents turned out, in order to ascertain the average weight of the receptacles in which the sugar has been packed, and to make the proper allowance. This is called the "Queen's tare, expression which is, we presume, a relic of the time when the Queen imposed a tax on the article. The sugar is turned out on large cloths spread upon the floor, and it is often a work of a good deal of difficulty to get it in again. As it is shovelled in, the men every now and then get into the hogsheads, or whatever the receptacles may be, and tread it down with their heavy shoes. They are supposed always to put a cloth over the sugar they are treading. We will hope they always do. The cost of this troublesome proceeding is not included in the "consolidated rate," but for every receptacle "tared" the merchant is charged from 1s. 3d. to 3s. 2d., according to the weight it contains.

The "taring floor" is about the most agreeable part of a sugar warehouse. Little mountains of sugar stand about it, looking so bright and fresh, so clean and tempting to any one with a "sweet tooth," that it is difficult to recognise their family relationship to the filthy-looking black bags and reeking casks and barrels on some of the floors below. On some of these floors quite a thick layer of black, sticky, saccharine matter has to be plodded through. It trickles from the vast piles of bags, and leaks from the easks and barrels, and, just as in the case of coffee, samples are often taken, examined for a moment, and perhaps tasted, and immediately dropped upon the floor. The holes, too, that are punctured in the bags when they are classified occasionally allow a little to trickle out, and occasionally a bag will burst or a barrel lose a stave; so that, in one way and another, most of the floors are pretty well coated with sugar that looks to be so much waste. Some of it is waste. It is scraped up into casks and thrown away. The greater part of this saccharine mud, however, is valuable, and is periodically divided among the merchants in proportion to their share of the contents of the warehouses, just as in the case of coffee. Any sugar refiner will know how to eliminate all its impurity, and, if necessary, will convert a great part of it into the purest and sweetest of "sparkling lump."

A "sweet tooth" is essential to the proper appreciation of these warehouses, but a lively imagination is a still better qualification for an enjoyable visit.

To look round upon the huge piles of bags and casks, to hear their foreign names, to see them coming in from vessels that have only just moored alongside the quay, and to look over the gleaming water and forests of masts from one of the upper floors—all this gives one a curious sense of nearness to the various countries contributing to our supplies. And where are these plantations, and where have the

ships come from?

We have at the present time about a dozen different sources of supply—Germany, Holland, Belgium, France, British West Indies and Guiana, British India, China and Hong Kong, Mauritius, Spanish West India Islands, Brazil, Java and Philippine Islands, and Peru. There are numerous other minor sources, which in official tables are usually put together as "other countries," and which altogether last year sent us just about one million cwt. The great bulk of the sugar coming into the dock warehouses we have been describing is from the West Indies. What wonder that the stranger finds a peculiar charm in surroundings which seem to bring him into close proximity to so much of terrestrial beauty—with Jamaica and its magnificent forests, its mountain cascades, its gorgeous birds, its palm-trees and pimento groves-St. Domingo, with its cedar trees, and lofty mountain peaks rising from their solemn twilight gloom-Cuba, with its pineapples and oranges, its palm groves and its grape vines swaying their luscious burdens in the breezes that sweep the very summits of the loftiest forest trees.

Of the twenty-one and a half millions of hundredweights that came into all the ports of England last year, considerably the larger share came from our own West Indian possessions—from our West Indian Islands and British Guiana, that is. Altogether they sent us nearly five millions out of the twentyone and a half millions. The next most important sources of supply were Java and the Philippine Islands, from which we received above two and threequarter millions of hundredweights. Germany comes next with 2,665,015cwt.; and then the Spanish West Indies, principally Cuba and Porto Rico, with rather more than two and a quarter millions of hundredweights. From France, including the French West Indian possessions, we have 1,804,613cwts., and from Brazil 1,859,880cwts. Peru stands next, then Holland, the Mauritius, Belgium, and British India, from which we got last year 311,768cwt. At the bottom of the list not included in "other countries" we find China and Hong Kong. The famous Demerara sugar is from our possessions on the mainland of South America—British Guiana. Dutch and French Guiana also send sugar, which of course figures under the imports from Holland and France. In connection with the sugar plantations of Demerara and Jamaica there are now refineries, from which sugar in considerable quantities has of late been imported into this country fit for consumption without undergoing any manufacturing process here.

We may just add that the wholesale sugar trade of London centres in Mincing Lane, samples being laid out in the various brokers' offices, and sales being effected either by private contract or in the commercial sale-rooms to which we had occasion to allude in

connection with tea and coffee.

We must now, however, refer for a moment to the subject of the sugar "bounties," which are creating so serious an agitation throughout the country, and so strong an outcry of injustice. Our object in this

article has been to give just the main features of the trade in sugar. The manufacture and refining do not come within our present scope. For the sake of clearness, however, we may just observe that the sugar-cane was at one time supposed to be the only source of sugar. It is very generally known now that this is not the case. Among other sources of sugar, it has been found that the tops of palm-trees yield a saccharine matter, large quantities of which have been manufactured into sugar, and put upon the market as a substitute for low-class cane-sugar. There are other sources from which the article may be derived. The most important of these is the beetroot, a kind of mangold wurtzel. It does not yield so much sugar as the cane. Cane-juice will sometimes contain 18 per cent. of its weight in sugar, the beet only about 12 to 15. Moreover, beet-sugar has an unpleasant smell and a peculiar flavour, both of which are entirely lost when refined into loaf-sugar, but which put it in its raw state at a great disadvantage in the market. Beet, however, has this great advantage over the cane—it does not require a tropical climate to grow in. It may be cultivated very satisfactorily in Europe, and a few years ago the Emperor Napoleon III determined to encourage its growth for sugar-making purposes in France. Large tracts of land were consequently put under cultiva-Whether the culture would have been commercially successful, independent of all State assistance, cannot very well be determined. To encourage the cultivation, and to ensure its success, however, a "bounty" of so much per ton on all exported beet sugar was paid by the State. That was commenced in 1861; it has been continued ever since, and the system has been adopted in Germany, Holland, Belgium, Austria, and some other parts.

At the present time this bounty amounts, it is believed, to £3, and sometimes as much as £4, a ton, though it is not easy to speak positively on the point. The money is not paid to French exporters avowedly as a bounty or premium, but they get it in the shape of drawback for duty paid. Sugar, it should be explained, is subject to a duty in France; but if sugar on which duty has been paid is exported from the country that duty is returned to the exporter in order that he may not find himself under a disadvantage in competition with foreign producers. The duty thus returned is called "drawback," and properly speaking it ought to amount to exactly the sum paid If that were so no one would have any ground of complaint. In France first, however, and afterwards in the other countries just specified, exporters have been allowed to recover not only the duty they have paid but money over and above that duty, amounting as it has been said to £3 or £4 per

ton on all refined beet sugar.

Our people say this is not fair. We can grow splendid sugar in our tropical colonies, and in this country we have natural advantages in the shape of abundance of coal and water, which enable us to compete on level ground with all the world in the refining of sugar. We could even stand against £1 or £2 a ton bounty, so strong is our natural position, but when artificial aid to the extent of £3 or £4 a ton is given to our competitors, there is no chance for us, and all over the country there is an outcry that sugar-refiners are being ruined. It is indisputable that large numbers of English loaf-sugar manufactories have been shut up, and the trade has gone to Paris and Amsterdam. The bounty system

has also seriously crippled our West India sugar trade. In connection with these facts it must be borne in mind that the present cheapness of sugar is not certainly permanent.

#### FALLACIES OF PHOTOGRAPHY.

IT is a prevalent notion that a photograph must necessarily, from the very nature of its production, be truthful in every detail to the object upon which the lens has been directed. So far from this being the case, there is really scarcely any limit to the amount of exaggeration and distortion which may be, legitimately or otherwise, introduced. The popular belief in the infallibility of the camera is, like many other popular beliefs, fallacious.

By the aid of a common lead pencil the wrinkles, furrows, and crabbed outlines of age can be quickly and easily removed from the face, leaving it as fair, round, and innocent of shadow as the countenance of a marble statue. A stern virago of sixty may, after an hour's labour on the negative by a skilful "retoucher," be transformed into a sprightly matron of thirty. In flattering "the human face divine" the operator has perhaps greater facilities than a painter. A fat person may be made slimmer, and a thin one

stouter; age and youth reversed.

Sometimes the very fidelity of photography, however much of a paradox it may sound, causes it to exaggerate. Rays of light affect the sensitive plate according to their intensity. Thus, a white shirt collar would give an impression quicker than the face, which is darker in proportion. Now suppose the face to be tanned or freckled, the tan marks being of a yellow tinge-which is even less "actinic" than a black coat—would give the photograph, if allowed to go"unretouched," the appearance of the face of the unfortunate "sitter" having been sprinkled with a pepper-box. I merely offer this instance as a prominent one of the manner in which the strict adherence of the photograph to the power which creates itlight-causes it to distort. Furrows, wrinkles, all marks of age and thought, give deeper shades than the eye can detect when gazing on the living face. The unerring penetration of the sensitive plate, in these instances, gives the subject as it is and often different from the view of it by the eye. According to the skill and taste of the artist, so does his work approach our conception of the original.

So much for the truthfulness of photography; now we will take it in a form in which it may be, and I have no doubt has been, put to a disreputable purpose. It is my object to remove the erroneous impression that a photograph is not open to criticism on account of its unquestionable and impartial truthfulness. Nothing is easier than for a fraud to be perpetrated in a Court of Justice by the production of a photograph of a building, exaggerated to the point required by the claimant or defendant, as the case may be. It is managed without the slightest difficulty, by the mere angle at which the picture is taken. A palace could thus be made to appear insignificant, compared with an adjacent house or hut. Photographic views must always be checked by other independent testimony where comparison of size is

required.

There is one phase of its operations, however, upon which the accuracy of the art may be relied on,

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Hothirt engag my a garde migh in which no distortion can be introduced, and that is the copying of documents to which forged signatures are supposed to have been added. Any tampering with a photograph of this description can be easily detected by having brought forward, along with the paper print, the negative it has been taken from. Pencilling on the surface can quickly be seen, and tampering with the print likewise, by holding it at an angle so as to catch any unevenness. The negative in cases of this latter class ought always to be produced with the print, or what is known in the pro-fession as a "dodge" might be resorted to and the forgery "worked up" (retouched) so as to resemble a bond fide signature. When a document supposed to contain forged writing is to be photographed, the copy should be made larger than the original, to more clearly observe the joins in the writing, it being impossible for even an expert imitator to forge a signature with anything like success by boldly tracing the whole word. Almost every writing forgery can be made apparent by the aid of the camera. There is another example in which photography reproduces an object in strict accordance to the view of it formed by the eye, and that is one of its own works. There can be no double distortion; once a photograph always a photograph; the copy is exactly like the print it is copied from. But, bear in mind, this only applies to the pure article. Once in the hands of the "worker up"—for there exist artists of this description for prints as well as negatives—every vestige of truth may be removed. The professors of what is termed by them the "art-science" find it much to their purpose to allow the popular idea to remain as it is, but photography, like many other excellent arts, is not above deception.

Varieties.

LORD PALMERSTON'S LINES ON THE DEATH OF HIS LADY.—"G. A. S.," in the "Illustrated London News," having asked for a copy of the pathetic lines written by Lord Palmerston, father of the premier, on the death of his lady, received copies from numerous correspondents. Here are the lines:

"Whoe'er, like me, with trembling anguish brings His heart's whole treasure to fair Bristol's springs; Whoe'er, like me, to soothe disease and pain, Shall court these salutary waves in vain; Condemned, like me, to hear the faint reply-To mark the fading cheek, the sinking eye; From the chill brow to wipe the damp of death, And watch with dumb despair the shortening breath; If chance direct him to this artless line, Let the sad mourner know his griefs were mine. Ordained to lose the partner of my breast, Whose beauty warmed me, and whose friendship blest; Framed every tie that binds the soul to prove, Her duty friendship, and her friendship love. Yet soon remembering that the parting sigh Ordains the just to slumber, not to die, The starting tear I checked, I kissed the rod, And not to earth resigned her, but to God."

HOLMAN HUNT (A note from an old contributor). — About thirty years ago, when on a visit to a relative, a young man engaged at the University Printing Office, Oxford, he called my attention to a gentleman who was seated at an easel in the garden, apparently absorbed in his work. My nephew, who might have seen me, while perpetrating "pot-boilers," covering

canvas at the rate of a square foot at a sitting, suggested that I should lend the quiet student a helping hand. "Can't you give him a lift, uncle?" he said. "He has been sitting there I can't tell you how many days, and does not seem to get on somehow." I took a stroll in the garden, looked at the swarm of gold fish in the pond, and then glanced over the shoulders of the artist at the work in hand. I saw at once that he was no ordinary worker. In the centre of a canvas some twenty-four by fifteen inches stood the figure of a nun, finely drawn, with a firm outline carefully corrected, but on which there was as yet no touch of colour. What struck me forcibly was the patient perseverance of the worker who had been employed so long upon a portion of the accessories only—which small portion, however, was a revelation to me, characterised as it was by most accurate finish and rigid fidelity to nature in details which the generality of artists were apt to consider of minor importance. As I left him at his quiet labours I could but ponder on the proofs of patience and perseverance which that little canvas had exhibited. "These are the grand elements of genius," I said to myself, "and where they are present success is said to be certain." I learned afterwards that the name of the quiet student was Holman Hunt, and at a subsequent visit to Oxford I had the pleasure of seeing, exhibited in the drawing-room of the University Printer, the famous picture (then just finished) the "Light of the World." I saw it several times, and learned to like it exceedingly, which I had not done at first. I noticed that when parties came to see it they almost invariably contemplated it in silence, and that often when spoken to they gave no reply. Not a word of criticism did I hear—a proof, I think, that the painter had been successful in appealing to the profounder feelings of the spectator.

Handel's Anvil.—W. H. B. writes to say that, "as a Bath man," he can rectify an error as to the Harmonious Blacksmith.
"There never was a music-seller of the name of Lintott or Linten, but Lintern; and his nephew and successor, Packer, had always over his door the sign of 'Packer, late Lintern.'
The tune of the 'Harmonious Blacksmith' was composed by Wagenseil, who was Chamber Musician to the Emperor of Germany, and was born in the year 1688, and was living in the year 1784. Handel took shelter in the forge of William Powel, a blacksmith, who is supposed to have been singing the tune to the strokes of the anvil, and during his stay out of the rain Handel composed the variations. The first note in the bass (is most likely represents the stroke of the anvil, as Handel begins the air on the unaccented part of the bar." We must leave these remarks to be noted by any one interested in the discussion.

Sunday Schools, First Notice of in England.—The "Gloucester Journal" has reprinted its number of Nov. 3, 1783, containing the first public notice of Sunday schools, said to have been written by Robert Raikes. The following is a transcript of this notice:—"Some of the clergy in different parts of this county, bent upon attempting a reform among the children of the lower class, are establishing Sunday schools, for rendering the Lord's Day subservient to the ends of instruction, which has hitherto been prostituted to bad purposes. Farmers, and other inhabitants of the towns and villages, complain that they receive more injury in their property on the Sabbath than all the week besides. This in a great measure proceeds from the lawless state of the younger class, who are allowed to run wild, on that day, free from every restraine. To remedy this evil, persons duly qualified are employed to instruct those that cannot read, and those that may have learnt to read are taught the catechism, and conducted to church. By thus keeping their minds engaged, the day passes profitably, and not disagreeably. In those parishes where this plan has been adopted, we are assured that the behaviour of the children is greatly civilised. The barbarous ignorance in which they had before lived being in some degree dispelled, they begin to give proofs that those persons are mistaken who consider the lower orders of mankind as incapable of improvement, and therefore think an attempt to reclaim them impracticable, or at least not worth the trouble." A statue of Raikes is to be erected in Gloucester Cathedral. At present there is only a tablet in an obscure corner of the church where he was buried.

EXHIBITION OF ARMOUR.—An interesting collection of ancient helmets and other armour, both foreign and English, was recently on inspection at the rooms of the Royal Archaeological Institute in New Burlington Street. The articles, about 200 or 250 in number, ranged from the tenth century before Christ down to the Stuart era in our own country. The examples were arranged chronologically. There were several specimens of

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Etruscan and Grecian art, and still more of Roman and Oriental workmanship. Among the most interesting objects were a brazen helmet of the time of the Roman occupation of this island, found at Witcham Gravel, in the Fen Country, and exhibited by Mr. Vipan; a Persian helmet of the seventeenth century, Mr. Vipan; a Persian neimet of the seventeenth century, exhibited by Mr. John Latham, F.S.A.; four Etruscan helmets of bronze, and another found in the Tigris, near the supposed passage of the "Ten Thousand," sent by Mr. Bloxham; some pikemen's helmets of the time of Charles I, exhibited by Mr. H. Ferguson; a Florentine casque, with three combs, exhibited by Mr. John W. Baily; an open casque of Italian steel repoussée work, by the same, its date probably about 1540. There were morions, beavers, close helmets, lobster-tailed helmets, early Indian head-pieces, spider helmets, casques, tilting helmets, etc. Consider-able interest attached to the tilting helmet of Sir Giles Capel, able interest attached to the tilting helmet of Sir Giles Capel, one of the knights who, in the suite of Henry viii, challenged all comers for thirty days in succession on the "Field of the Cloth of Gold." This helmet, exhibited by the Baron de Cosson, used to hang in the parish church of Raine, near Braintree, Essex, down to about the year 1840, when it was removed. Some German fluted helmets, "casquetels," with movable visors, and an Italian visored helmet of the early sixteenth century, were well worthy of inspection, and Sir Richard Wallace's "peakfaced" helmet, of the time of Richard II, and Mr. Burges's wider helmet, but whis is said to have helmet at the service of the service of the service helmet, whis is said to have helmet at the service helmet. spider helmet, which is said to have belonged to a regiment of horse formed by Henry IV of France. To the helmets exhibited by Mr. Bloxham the greater interest attaches, as three of them, of Etruscan manufacture, were bought at the sale of the effects of Samuel Rogers, the poet, while a fourth, of bronze, was found in the bed of the Illysus, at Athens. Besides the helmets, the exhibition contains various specimens of hauberks, brigandines, and coats of mail and of chain armour, Italian, English, and and coats of mail and of chain armour, Italian, English, and Irish; one of these, found in the Phœnix Park at Dublin, and exhibited by Mr. Robert Day, bears the armorial badge of the ancient O'Neills. Among the most curious specimens of armour was the banded mail, exhibited by Mr. William G. B. Lewis, constructed of iron or steel rings sewn strongly into cloth or leather. A large variety of these was to be seen in a glass case in a back room. The collection was arranged under the care, and to a great extent by the hands, of the Baron de Cosson and Mr. Burges. Some specimens were also sent from the Royal Armoury at Woolwich. This suggests that a permanent collection might have place in the Museum at South Kensington, or other accessible place, as having historical value as well as mere archæological interest.

Janet Hamilton.—In the month of July an interesting ceremony took place in Coatbridge, in the unveiling of a memorial to one of the most remarkable characters of the present generation. Janet Hamilton was the daughter of a small shoemaker, afterwards a field-labourer, in the parish of Old Monkland, and was born, it is said, at Ayr, in 1795. She married, report says, in her fourteenth or fifteenth year, her father's journeyman, who settled in Coatbridge, and by him bore a family of ten. In this town, after a happy, laborious, and exemplary life, a life for which all who knew and came in contact with her, or have been in any way made acquainted with her, have reason to be grateful, a life of which Scotland may be proud, she died in October, 1873. In youth she had almost no education, the spinning-wheel and tambour-frame being her constant occupation. At the age of fifty she taught herself to write, by copying from printed books. In her thirst for knowledge she spent the greater part of her nights, after hard days' work, in reading. In her household economy, despite her limited means and large family, she was a pattern of excellence, and her social influence for good in the place of her residence was incalculable. But excessive application to books and daily labour, the strain demanded by the tambour-frame being especially severe, told their tale. For the last ten years of her life she was blind, though she retained to the end her cheerfulness and her love of poetry and music. To the last a warm sympathiser with the cause of temperance; her courtesy, her charity, her kindliness, her piety, endeared her to all, and she was followed to the grave by thousands who mourned a loss truly felt to be irreparable. Two volumes of her works, prose and poetry, have been published.

PHONETIC SPELLING.—An American paper says that the only notable convert is Mr. Joshua Billings, "hoz almynax r in daly yoos." But Mr. Billings is only half converted, as he spells but a part of his words on the new plan. "There ain't nothing," he says, "so cheap az bad spellin, and if it iz sutch an element of success as sum shrewd kriticks hav diskovered, they owe it to their ains and assines to adopt it at once and bekum ritch and famus." How nearly Mr. Billings comes to the

true phonetic system will be seen by taking an extract from Mr. Pitman, the great master. He writes: "Mei deietitik ekspeeriens iz breefli this,—Abuv forti yeerz ago dispepsia was kariing me tu the graiv. Medikal advizerz recommended animal food three teimz a dai insted of wuns, and a glas ov wein. On this rejimen ei woz nuthing beterd but raather wurs. Ei avoided the meet & the wein, gradeuali rekuverd mei digestiv pouer, & hav never sins noan, bei eni pain, that ei hav a stumak." Mr. Carlton, the publisher, says that he has paid Mr. Billings 35,000 dols. copyright on his "Almynax."

MR. PITT ON HIS DEATH-BED.—In a letter to the Duke of Wellington, Dr. Philpotts, Bishop of Exeter, said:—"Mr. Pitt on his death-bed felt and deplored his own neglect of prayer, When told of his imminent danger, and invited to prepare himself by prayer for appearing before God, 'I have too long neglected prayer,' said he, 'during life to have much confidence in its efficacy on my death-bed. But I throw myself on the mercy of God through Jesus Christ!' This he uttered with a fervency but humbleness of devotion which was most touching. I have heard this anecdote on the authority of Lord Grenville,"—Wellington Despatches, Vol. VIII, 1880.

AMERICAN STATISTICS OF PROGRESS.—The official Census returns of the American cities on June 1 show that the population of New York was 1,209,561, an increase in ten years of 234,269; Philadelphia, 847,432, an increase of 173,430; Brooklyn, 554,696, an increase of 159,594; Boston, 352,000, an increase of 101,474; Baltimore, 331,000, an increase of 63,646; Chicago, 477,500, an increase of 176,023; Cincinnati, 246,151, an increase of 29,914; New Orleans, 207,328, an increase of 15,910; San Francisco, 227,350, an increase of 77,877; and Washington, 160,000, an increase of 50,801. The Treasury during the fiscal year just closed received 123,623,251dols. inland revenue, and 185,108,611dols customs. This is 10,061,640dols. increase on the inland revenue, and 47,858,563dols. increase in the customs, over the previous year. 42,028 emigrants landed in New York in June, making 177,362 arrivals in the half-year against 55,910 arrivals during the first half of 1879.

Carl Bock on Borneo.—The enterprising journey of Carl Bock through the interior of Borneo has excited much interest among geographers. He claims to have discovered a new race, the "Orang Poonan," or Forest people. Till the Dutch Government has published his report and drawings, no account of his travels will appear in this country, but he has promised for next year some papers in the "Leisure Hour," to the readers of which he is already known by adventures in other regions.

Public Education in England.—The Report of the Committee of the Privy Council on Education for England and Wales for the year 1879 states that considerable progress was made in many important respects during the year, though the exceptionally severe winter of 1878-9 had an unfavourable effect on school attendance. In the year ending with August last the inspectors visited 17,166 day schools in England and Wales to which annual grants were made, furnishing accommodation for 4,142,224 scholars. There were on the registers the names of 3,710,883 children, of whom 1,208,016 were under seven years of age, 2,333,973 between seven and thirteen, and 168,894 above thirteen. Of these scholars 3,122,672 were present on the day of inspection, while the average daily attendance throughout the year was 2,594,995; 2,492,456 had made the requisite number of attendances, and were qualified to bring grants to their schools. Of these 619,912 were under seven years of age, and did not undergo individual examination; 1,760,040 were actually presented for examination in reading, writing, and arithmetic, and of these 1,084,622—or 61:60 per cent.—passed without failure in any one of the three subjects. The proportion who passed in reading was \$7:53 per cent., in writing 80:08 per cent., and in arithmetic 73:87 per cent. These figures show an increase, as compared with those of the last report, of 5 per cent. in accommodation, 6 per cent., in the number on the registers, 7:9 per cent. in average attendance, and 12:7 per cent. in the number examined. The local contributions towards the cost of the public elementary schools consisted of £754,134 in voluntary subscriptions, £636,792 from school rates (£66,599 more than in 1878), and £1,372,365 from school pence—an increase of £97,292 as compared with the previous year. The annual Government grants to elementary day schools were in the year £1,981,720, or 15s. 34d, per scholar in average attendance—an increase of £161,059, or 1½d, per scholar, on the grants of 1878.

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